



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,001	04/20/2001	Harald Apfelthaler	KWO-17702/01	2739

7590 05/10/2002

Gifford, Krass, Groh, Sprinkle,
Anderson & Citkowski, P.C.
Suite 400
280 N. Old Woodward Avenue
Birmingham, MI 48009-5394

EXAMINER

GREEN, CHRISTY MARIE

ART UNIT PAPER NUMBER

3635

DATE MAILED: 05/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	Application No. 09/839,001	Applicant(s) APFELTHALER, HARALD	
	Examiner Christy M Green	Art Unit 3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4</u> . | 6) <input type="checkbox"/> Other: |

Art Unit: 3635

DETAILED ACTION

This is a first office action for serial number 09/839001, entitled Terminal Plug for screwing a muntin bar to a spacer frame of in particular an insulated glass window, filed on April 20, 2001.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the relieved surfaces or slotted walls, and refuse material must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Until further clarification of these limitations are made within the drawings, the examiner will interpret them accordingly.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-6 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Governale, US Patent # 4,707,963.

Art Unit: 3635

Governale discloses the claimed invention a terminal plug made out of plastic (column 3, line 9) comprising a flange (35) which is to be positioned onto an outer surface of the muntin bar (23), and a plug body (40) to be fitted into a hollow space (38) of the muntin profile, wherein when installed into the muntin bar (23), the plug body provides a press fit by at least a part of its surface pressed against a surface of an inner wall of the buntin bar, which the terminal plug is formed (column 3, lines 27-32); the longitudinal slot (45) of which is coaxially aligned with the longitudinal axis of the plug body ('45'-figure 4); the slot completely penetrates the plug body (figure 4); the slot has a width at the upper end of the plug (43), which is different from the width at the bottom end of the plug (where 45 points to-figure 4); and, the slot (45) has a greater width (43) at the upper part of the plug body (interpreted to be the area where the upper part of the plug body fits-where 38 points to in figure 5) facing the flange (35) whereas its width is smaller (45) in that part of the plug body facing its bottom end (where 40 points to).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Governale.

Governale discloses the claimed invention as stated above in claim 1, including a nail (41) is received into the longitudinal slot (45), although Governale discloses a nail and not a screw, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the nail of Governale in order to permanently fixedly attach the anchor to the frame member (column 3, lines 58-60).

Claims 7-10, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Governale in view of Anquetin, US Patent # 5,312,215.

In regards to claims 7-10, 12 and 13, Governale discloses the claimed invention as stated above in claim 1, except for the longitudinal slot has relieved or slotted walls; the slot has teeth; the distance between the opposed walls of the slot with the teeth becomes smaller starting from the upper end of the plug provided with the flange down to the bottom end of the plug; the teeth being such that a screw, by which the terminal plug is fixed to the spacer frame, is passed through the slot and is provided with a tip which abuts against the teeth; the upper end of the slot comprises a recess passing through the flange of the terminal plug; and, the recess is formed by a cone followed by a cylindrical hollow space.

Anquetin teaches that it is known in the art to provide a terminal plug to screw in a hole in a rigid work piece comprising a longitudinal slot (14) has relieved or slotted walls (30) to allow for an enlarged hole or to grip the screw tightly (column 3, lines 64-68); the slot has teeth (16) to allow the screw to engage the bore (column 3, lines 11-15); the distance between the opposed walls of the slot with the teeth becomes smaller starting from the upper end of the plug (where 14 points to) provided with the flange (4)

Art Unit: 3635

down to the bottom end of the plug (where 18 points to); the teeth (16) being such that a screw (38), by which the terminal plug (figures 1 and 2) is fixed to the spacer frame (34, 46), is passed through the slot (figures 4, 5, 8 and 9) and is provided with a tip (see figure 4 and attached figure 5) which abuts against the teeth to allow small expansions of the plug (column 1, lines 29-31); the upper end (2) of the slot (14) comprises a recess (see attached figure 2) passing through the flange (4) of the terminal plug to engage the surface of the work piece (column 2, lines 66-68); and, the recess is formed by a cone (see attached figure 2) followed by a cylindrical hollow space (column 3, lines 9-11) to allow the screw to be inserted into the plug. It would have been obvious to one having ordinary skill in the art to provide the longitudinal slot with the limitations above of Anquentin's plug with the plug of Governale in order to increase the strength of the connection of the screw/nail of the plug and to hold the plug more securely within the material provided as well as increase the utility of the plug with varying materials (column 3, lines 49-51, column 4, lines 10-13 and lines 33-35).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christy M Green whose telephone number is 703-308-9693. The examiner can normally be reached on M-F 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Friedman can be reached on 703-308-0839. The fax phone numbers

Art Unit: 3635


for the organization where this application or proceeding is assigned are 703-872-9326

for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

cg

April 25, 2002


Yvonne M. Horta

